						Complete if Known			
					Application Number	09/983,020			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	October 22, 2001				
STATE	MENT	-BÆ	APPLIC	CANT	First Named Inventor	Steven W. HOMANS et al.	-		
	MON O T	2003 ,	(g)		Group Art Unit 1631				
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<b>.</b>	ن زنجه			Examiner Name Michael L. Borin				
Sheet	BIRAC	EMAY	of	1	Attorney Docket Number	2833-108 (Formerly 1496-205)			
				NON PA	TENT LITERATURE DOCU	MENTS	_		
Examiner Initials*	Cite No.1	1	Include r item (book	ame of the au , magazine, jo	thor (in CAPITAL LETTERS), title o urnal, serial, symposium, catalog, e publisher, city and/or country w	f the article (when appropriate), title of the tc.), date, page(s), volume-issue number(s), here published	T²		
M	38.	Chey	-binding	Domain in		nce Assignments and Global Fold of a ific Kinase of Escherichia Coli,"			
m	39.	Hete	ronuclea	r Nuclear M	Utilization of Site-Directed Spin Labeling and High-Resolution Magnetic Resonance for Global Fold Determination of Large Proteins erhauser Effect Data," <u>Biochemistry</u> 39(18):5355-5365, May 9, 2000.				
							<u> </u>		
							-		
				<del></del>					
:									
				·					
					- · · · · · · · · · · · · · · · · · · ·				
Examiner Signature		· · · · · ·		Mp	m I	Date Considered 2/03-			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(MAY	0 1 2007	ىد 16ن			)				•			
The state of	BANFMAR	1 per				Complete if Known						
4							tion	Number				
INFORMATION DISCLOSURE STATEMENT BY APPLICANT					F	Filing D	ate		October 22, 2001			
STATEMENT BY AFFLICANT						First Na	ame	d Inventor	Steven W. HOMANSEGEIVED			
						Group /	Art (	Jnit	1645		****	
					E	Examiner Name To be assigned						
Sheet	1		of	4	1	Attorne	y Do	ocket Number	1496-205 TE	CH	CENTER 1600/291	00
					U.S	. PATI	ENT	DOCUMENTS				
			U.S. Pat	ent Docu	ment			N (D-4-				
Examiner Initials*	Cite No.1			r		(ind Code <sup>2</sup>		Name of Patentee or Applicant of Cited Document			Date of Publication of Cited Document MM-DD-YYYY	
My	1	5,817,4	474				Br	own			October 6, 1998	
	2	6,335,	196				Ar	nderson, III et al.			January 1, 2002	
	3	6,340,	578				Ar	nderson, III et al.			January 22, 2002	2
pin.	4	6,111,	066				Ar	iderson, lil et al.			August 29, 2000	
			<u>.</u>	<u></u>		-	_					
	}		<del>-</del>			<del>                                     </del>	-					
												_
						<del> </del>	_					
					ODE	CNR	TE	NT DOCUMENT				
		ſ	Foreign I					A1 DOCUMENT	-	1		Г
Examiner Cite Office <sup>3</sup>		Foreign Patent Doc ite 0.1 Office3 Number Code		r <sup>4</sup> 1	Kind <sup>5</sup>	_	Name of Patento Cited D	ee of Applicant of ocument		te of Publication of Cited Document MM-DD-YYYY	Te	
		<u></u>	-			_	$\dashv$			<u> </u>		_
			-				$\dashv$			├		-
			-				+			$\vdash$		-
							$\top$					
Examiner Signature				11	l fis	2			Date Considered	,	12/200	5

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&#</sup>x27;Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code. <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached. AB indicates that only an English language abstract is attached.

OIPE		;
MAY 0 1 2002 5		Complete if Known
INFORMATION DISCLOSURE	Application Number	09/983,020
	Filing Date	October 22, 2001
STATEMENT BY APPLICANT	First Named Inventor	Steven W. HOMANS et al.
	Group Art Unit	1645 RECEIVED
	Examiner Name	To be assigned MAY 0 7 2002

						Examiner Name	To be assigned	MAY 0 7 2002		
5	Sheet	2		of	4	Attorney Docket Number	1496-205			
				OTHER F	PRIOR ART	- NON PATENT LITERATU	RE DOCUMENTS	CH CENTER 1600/2	2900	
	Examiner Cite No.1			Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published						
My!		5	Ram Liqui	irez et al. d Crystal	, "Modulatio line Mediun	on of the Alignment Tensor of n," <u>J. Am. Chem. Soc.</u> 120:91	Macromolecules Di 06-9107, 1998.	ssolved in a Dilute		
	(	6	Tjand Hum	dra, et al. an Ubiqu	, "Magnetic itin Resultir	Field Dependence of Nitroge g from Relaxation," J. Am.	en-Proton <i>J</i> Splittings <u>Chem. Soc.</u> , 118:62	s in <sup>15</sup> N-Enriched 64-6272, 1996.		
	•	7				on Heteronuclear NMR of Hu <u>iomol. NMR</u> , 10:289-292, 199		Aqueous Liquid		
	`	8				d Dilute Bicelle Solutions for Ind. NMR, 12:447-451 1998.	High-Resolution NMI	R of Biological	<u> </u>	
	•	9				Novel Aqueous Liquid Crystal aution," <u>J. Am. Chem. Soc.</u> 12				
	,	10	Clore Nem	e et al., "N atic Phas	Measureme e of a Collo	nt of Residual Dipolar Couplir idal," <u>J. Am. Chem. Soc.</u> 12	ngs of Macromolecul 20:10571-10572, 19	les Aligned in the 98.		
	,	11	Hans Cour	sen et al., oling Inter	"Tunable A actions," <u>N</u>	Nignment of Macromolecules ature Structural Biology 5(12)	by Filamentous Pha :1065-1074, 1998.	ge Yields Dipolar		
	/	12	Kiddl 13C-E	e et al., " nriched (	Residual D Oligosacch	polar Couplings as New Con arides," <u>FEBS Letters</u> 436:12	formational Restrain 8-130, 1998.	ts in Isotopically		
	٠,	13				/stalline Medium for Measurir ures," <u>J. Biomol. NMR</u> , 12:44		Couplings Over a		
	^	14	Ottig Acidi	er et al., ' c and Ba	'Bicelle-Bas sic pH Valu	sed Liquid Crystals for NMR-Fes," <u>J. Biomol. NMR</u> , 13:187-	Measurement of Dipo 191, 1999.	olar Couplings at		
		15				Crystallites: A New and Robi i Dipolar Couplings," <u>J. Am. C</u>				
	-	16				of Biological Macromolecule nts," <u>J. Am. Chem. Soc.</u> 122		Liquid Crystalline		
. 17 Mueller et al., "A Method for Inc Cases of (Near) Axial Symmetr										
	Hus et al., "De Novo Determination of Protein Structure by NMR Using Orientational and Long-Range Order Restraints," J. Mol. Biol. 298:927-936, 2000.									
M	My. 19					polar.¹H-¹⁵N and ¹H-¹³C Coupl acromolecules in Solution," <u>N</u>				

Complete if Known **Application Number** 09/983,020 INFORMATION DISCLOSURE Filing Date October 22, 2001 STATEMENT BY APPLICANT Steven W. HOMANS et al. First Named Inventor Group Art Unit 1645 To be assigned MAY 0 7 2002 **Examiner Name** Attorney Docket Number 1496-205 Sheet 3 of

011001		0	) <u> </u>	1	rational books named	1400 200	TEALLARNITED JACK	فممنه	ıA
		OTHER PRI	OR ART	- NON PAT	TENT LITERATURE DOCUM	MENTS	TECH CENTER 160	0/230	U
Examiner Initials*	Cite No.1		k, magazi	ne, journal, s	ITAL LETTERS), title of the artic serial, symposium, catalog, etc.) blisher, city and/or country when	), date, page	e(s), valume-issue	T²	

My	20	Wang et al., "Simultaneous Measurement <sup>1</sup> H- <sup>15</sup> N, <sup>1</sup> H- <sup>13</sup> C' and <sup>15</sup> N- <sup>13</sup> C' Dipolar Couplings in a Perdeuterated 30 kDA Protein Dissolved in a Dilute Liquid Crystalline Phase," <u>J. Am. Chem. Soc.</u> 120:7385-7386, 1998.	
,	21	Ottiger et al., "Measurement of J and Dipolar Couplings from Simplified Two-Dimensional NMR Spectra," <u>J. Magn. Reson.</u> 131:373-378, 1998.	
	22	Lerche et al., "Pulse Sequences for Measurement of One-Bond <sup>15</sup> N- <sup>1</sup> H Coupling Constants in the Protein Backbone," <u>J. Magn. Reson.</u> 140:259-263, 1999.	
	23	Tjandra et al., "Measurement of Dipolar Contributions to <sup>1</sup> JCH Splittings from Magnetic-Field Dependence of J Modulation in Two-Dimensional NMR Spectra," <u>J. Magn. Reson.</u> 124:512-515, 1997.	
(	24	Clore et al., "Direct Structure Refinement Against Residual Dipolar Couplings in the Presence of Rhombicity of Unknown Magnitude," <u>J. Magn. Reson.</u> 131:159-162, 1998.	
O	25	Clore et al., "A Robust Method for Determining the Magnitude of the Fully Asymmetric Alignment Tensor of Oriented Macromolecules in the Absence of Structural Information," <u>J. Magn. Reson.</u> 133:216-221, 1998.	
•	26	Clore et al., "Impact of Residual Dipolar Couplings on the Accuracy of NMR Structures Determined from a Minimal Number of NOE Restraints," <u>J. Am. Chem. Soc.</u> 121:6513-6514, 1999.	
,	27	Beger et al., "Protein φ and ψ Dihedral Restraints Determined from Multidimensional Hypersurface Correlations of Backbone Chemical Shifts and their Use in the Determination of Protein Tertiary Structures," <u>J. Biomol. NMR</u> 10:129-142, 1997.	
(	28	Ottiger et al., "Determination of Relative N-H <sup>N</sup> , N-C', C <sup>α</sup> -C', and C <sup>α</sup> -H <sup>α</sup> Effective Bond Lengths in a Protein by NMR in a Dilute Liquid Crystalline Phase," <u>J. Am. Chem. Soc.</u> 120:12334-12341, 1998	
<i>I</i> .	29	Ikura et al., "A Novel Approach for Sequential Assignment of <sup>1</sup> H, <sup>13</sup> C, and <sup>15</sup> N Spectra of Larger Proteins: Heteronuclear Triple-Resonance Three-Dimensional NMR Spectroscopy," <u>Biochemistry</u> 29:4659-4667, 1990.	
r	30	Brünger, X-PLOR version 3.1: "A system for X-Ray Crystallography and NMR", Yale University Press, New Haven, CT., v-xv,1987.	
	31	Losonczi et al., "Order Matrix Analysis of Residual Dipolar Couplings Using Singular Value Decomposition," <u>J. Magn. Reson.</u> 138:334-342, 1999.	
mas	32	Tolman et al., "Nuclear Magnetic Dipole Interactions in Field-Oriented Proteins: Information for Structure Determination in Solution", Proc. Natl. Acad. Sci. USA 92:9279-9283, 1995.	

MAY 0 1 2002 Complete if Known 09/983.020 Application Number GRATATION DISCLOSURE October 22, 2001 Filing Date STATEMENT BY APPLICANT Steven W. HOMANS et al First Named Inventor 1645 Group Art Unit To be assigned Y 0 7 2002 **Examiner Name** 1496-205 4 Attorney Docket Number of TECH CENTER 1600/2900 Sheet 4 OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Cite Examiner item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue Initials\* No.1 number(s), publisher, city and/or country where published Tjandra et al., "Direct Measurement of Distances and Angles in Biomolecules by NMR in a 33 Dilute Liquid Crystalline Medium," Science 278:1111-1113, 1997. Fowler et al., "Rapid Determination of Protein Folds Using Residual Dipolar Couplings," J. 34 Mol. Biol. 304:447-460, 2000. Hus et al., "Determination of Protein Backbone Structure Using Only Residual Dipolar 35 Couplings," J. Am. Chem. Soc. 123:1541-1542, 2001. Al-Hashimi et al., "Variation of Molecular Alignment as a Means of Resolving Orientational 36 Ambiguities in Protein Structures from Dipolar Couplings," J. Magn. Reson. 143:402-406, 2000. Mueller et al., "Global Folds of Proteins with Low Densities of NOEs Using Residual Dipolar 37 Couplings: Application to the 370-Residue Maltodextrin-Binding Protein," J. Mol. Biol. 300:197-212, 2000. Date 2003. Examiner Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*Unique citation designation number. \*Applicant is to place a check mark here if English language Translation is attached.